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PATENT

Attorney's Docket No. 4339/4358A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Box Patent Application
Assistant Commissioner for Patents
Washington, DC 20231**

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of Inventor(s):

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Simpsonville, South Carolina 29680

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8 Spicy Pond Road
Howell, New Jersey 07731

For (Title):

**CATALYST MEMBERS HAVING ELECTRIC ARC
SPRAYED SUBSTRATES AND METHODS OF MAKING THE SAME**

1. Type of Application

This new application is for a(n)

- ☐ Original (nonprovisional)
- ☐ Design
- ☐ Divisional
- ☐ Continuation
- ☒ Continuation-in-part (CIP)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)

- ☐ The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

Certification under 37 CFR 1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date April 16, 1999 in an envelope as "Express Mail Post Office to Addressee", Mailing Label Number EL107620678US, addressed to the: Assistant Commissioner for Patents, Washington, DC 20231.

Phyllis Nova

(type or print name of person mailing paper)

[Signature]
(Signature of person mailing paper)

3. Papers enclosed which are required for filing date under 37 CFR 1.53(b) (Regular) or 37 CFR 1.153 (Design) Application.

43 Pages of specification

6 Pages of claims

1 Pages of abstract

17 Sheets of drawing

- ☐ Formal
☒ Informal

- ☐ The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)". 37 CFR 1.84(b).

4. Additional papers enclosed:

- ☐ Preliminary Amendment
☐ Information Disclosure Statement (37 CFR 1.98)
☐ Form PTO-1449
☐ Citations
☐ Other

5. Declaration or oath

- ☒ Enclosed

Executed by

(check all applicable boxes)

- ☒ inventor(s).

- ☐ legal representative of inventor(s).
37 CFR 1.42 or 1.43.

- ☐ joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.

- ☐ This is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See item 13 below for fee.

- ☐ Not enclosed.

6. Inventorship Statement

The inventorship for all the claims in this application are:

- ☐ The same.
or

- ☐ Not the Same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,
☐ is submitted.
☐ will be submitted.

7. Language

- ☒ English
☐ Non-English
☐ The attached translation includes a statement that the translation is accurate. 37 CFR 1.52(d).

8. Assignment

- ☐ an assignment of the invention to ENGELHARD CORPORATION
☐ is attached. A Separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached.
☒ will follow.

NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).

WARNING: A newly executed "CERTIFICATE UNDER 37 CFR 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

9. Certified Copy

Certified Copy(ies) of application(s)

Country	Appln. No.	Filed
Country	Appln. No.	Filed
Country	Appln. No.	Filed

from which priority is claimed

- ☐ is (are) attached.
☐ will follow.

NOTE: The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

10. Fee Calculation (37 CFR 1.6)

A. ☒ Regular application

CLAIMS AS FILED

Number filed			Number Extra		Rate	Basic Fee 37 CFR 1.16(a) \$760.00
Total Claims (37 CFR 1.16(c))	109	- 20 =	89	X	\$18.00	\$1,602.00
Independent Claims (37 CFR 1.16(b))	7	- 3 =	4	X	\$78.00	\$ 312.00
Multiple Dependent Claim(s), if any (37 CFR 1.16(d))				+	\$260.00	\$ 260.00

- ☐ Amendment cancelling extra claims is enclosed.
☐ Amendment deleting multiple-dependencies is enclosed.
☐ Fee for extra claims is not being paid at this time.

NOTE: If the fees for extra claims are not paid on filing, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).

Filing Fee Calculation \$ 2,174.00

B. ☐ Design application
(\$330.00 – 37 CFR 1.16(f))

Filing Fee Calculation \$ _____

11. Small Entity Statement(s)

- ☐ Statement(s) that this is a filing by a small entity under 37 CFR 1.9 and 1.27 is (are) attached.

(complete the following, if applicable)

- ☐ Status as a small entity was claimed in prior application
_____/_____, filed on _____, from which benefit
is being claimed for this application under:

- 35 U.S.C. ☐ 119(e),
☐ 120,
☐ 121,
☐ 365(c),

and which status as a small entity is still proper and desired.

- ☐ A copy of the statement in the prior application is included.
Filing Fee Calculation (50% of A, B or C above)

\$ _____

12. Request for International-type Search (37 CFR 1.104(d))

(complete, if applicable)

- ☐ Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

13. Fee Payment Being Made at This Time

- ☐ Not Enclosed
- ☐ No filing fee is to be paid at this time.
(This and the surcharge required by 37 CFR 1.16(e) can be paid subsequently).

☒ Enclosed

- | | |
|---|--------------------|
| <input checked="" type="checkbox"/> Basic filing fee | \$ <u>2,174.00</u> |
| <input type="checkbox"/> Recording assignment
(\$40.00; 37 CFR 1.21(h)) (See attached "COVER SHEET
FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION") | \$ _____ |
| <input type="checkbox"/> Petition fee for filing by other than all the inventors or person on
behalf of the inventor where inventor refused to sign or cannot be
reached. (\$130.00; 37 CFR 1.47 and 1.17(h)) | \$ _____ |
| <input type="checkbox"/> For processing an application with a specification in a
non-English language (\$130.00; 37 CFR 1.52(d) and 1.17(k)) | \$ _____ |
| <input type="checkbox"/> Processing and retention fee
(\$130.00; 37 CFR 1.53(d) and 1.21(l)) | \$ _____ |
| <input type="checkbox"/> Fee for international-type search report
(\$40.00; 37 CFR 1.21(e)) | \$ _____ |

Total fees enclosed \$ 2,174.00

14. Method of Payment of Fees

- ☒ Charge Account No. 05-1070 in the amount of \$ 2,174.00.

Commissioner is hereby authorized to charge any additional fees required by this paper and during the entire pendency of this application to Account No. 05-1070.

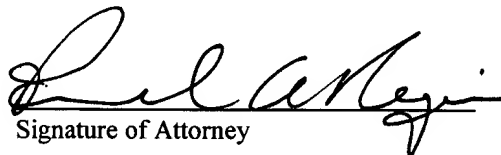
Credit any overpayment to Account No. 05-1070.

Date: April 16, 1999

Reg. No. 28,649

Tel. No. (732) 205-6241

Engelhard Corporation
101 Wood Avenue
P.O. Box 770
Iselin, New Jersey 08830


Signature of Attorney

Richard A. Negin
(type or print name of attorney)

(check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED)

- **Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed**

Number of pages added _____

- ☐ Plus Added Pages for Papers Referred to in item 4 above

Number of pages added _____

- ☐ Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer Inventor(s) of the subject matter claimed in this application.

Number of pages added _____

- ☐ Plus “Assignment Cover Letter Accompanying New Application”

Number of pages added _____

- ☐ **Statement Where No Further Pages Added**

(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item)

- ☐ This transmittal ends with this page.

**ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF
PRIOR U.S. APPLICATION(S) CLAIMED**

NOTE: "In order for an application to claim the benefit of a prior filed copending national application, the prior application must name as an inventor at least one inventor named in the later filed application and disclose the named inventor's invention claimed in at least one claim of the later filed application in the manner provided by the first paragraph of 35 U.S.C. 112." 37 CFR 1.78(a).

NOTE: "In addition the prior application must be (1) complete as set forth in § 1.51, or (2) entitled to a filing date as set forth in § 1.53(b) and include the basic filing fee set forth in § 1.16; or (3) entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(f) within the time period set forth in § 1.53(d)." 37 CFR 1.78(a).

17. Relate Back

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(complete the following, if applicable)

☐ Amend the specification by inserting, before the first line, the following sentence:

A. 35 U.S.C. 119(e)

NOTE: "Any nonprovisional application claiming the benefit of one or more prior filed copending provisional applications must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior provisional application, identifying it as a provisional application, and including the provisional application number (consisting of series code and serial number)." 37 C.F.R. § 1.78(a)(4).

☐ "This application claims the benefit of U.S. Provisional Application(s) No(s):

APPLICATION NO(S):

FILING DATE

_____/_____
_____/_____
_____/_____

_____"
_____"
_____"

B. 35 U.S.C. 120, 121 and 365(c)

NOTE: "Any nonprovisional application claiming the benefit of one or more prior filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross-references to other related applications may be made when appropriate. (See § 1.14(b))." 37 C.F.R. § 1.78(2).

- ☒ "This application is a
☐ continuation
☒ continuation-in-part
☐ divisional

of copending application(s)

- ☒ application number 09 / 071,663 filed on May 1, 1998"
☐ International Application _____ filed on _____
_____ and which designated the U.S."

NOTE: The proper reference to a prior filed PCT application that entered the U.S. national phase is the U.S. serial number and the filing date of the PCT application that designated the U.S.

NOTE: (1) Where the application being transmitted adds subject matter to the International Application, then the filing can be as a continuation-in-part or (2) if it is desired to do so for other reasons then the filing can be as a continuation.

- ☐ "The nonprovisional application designated above, namely application _____ / _____, filed _____, claims the benefit of U.S. Provisional Application(s) No(s):

APPLICATION NO(S):

FILING DATE

_____ / _____	_____ "
_____ / _____	_____ "
_____ / _____	_____ "

NOTE: The deadline for entering the national phase in the U.S. for an international application was clarified in the Notice of April 28, 1987 (1079 O.G. 32 to 46) as follows:

"The Patent and Trademark Office considers the international application to be pending until the 22nd month from the priority date if the United States has been designated and no Demand for International Preliminary Examination has been filed prior to the expiration of the 19th month from the priority date and until the 32nd month from the priority date if a Demand for International Preliminary Examination which elected the United States of America has been filed prior to the expiration of the 19th month from the priority date, provided that a copy of the international application has been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively. If a copy of the international application has not been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively, the international application becomes abandoned as to the United States 20 or 30 months from the priority date respectively. These periods have been placed in the rules as paragraph (h) of § 1.494 and paragraph (i) of § 1.495. A continuing application under 35 U.S.C. 365(c) and 120 may be filed anytime during the pendency of the international application."

18. R late Back—35 U.S.C. 119 Priority Claim f r Prior Application

The prior U.S. application(s), including any prior International Application designating the U.S., identified above in item 17B, in turn itself claim(s) foreign priority(ies) as follows:

country	appln. no.	filed on
The certified copy(ies) has (have)		
<input type="checkbox"/> been filed on _____, in prior application 0 / _____, which was filed on _____.		
<input type="checkbox"/> is (are) attached.		

WARNING: The certified copy of the priority application that may have been communicated to the PTO by the International Bureau may **not** be relied on without any need to file a certified copy of the priority application **in the continuing application**. This is so because the certified copy of the priority application communicated by the International Bureau is placed in a folder and is not assigned a U.S. serial number unless the national stage is entered. Such folders are disposed of if the national stage is not entered. Therefore, such certified copies may not be available if needed later in the prosecution of a continuing application. An alternative would be to physically remove the priority documents from the folders and transfer them to the continuing application. The resources required to request transfer, retrieve the folders, make suitable record notations, transfer the certified copies, enter and make a record of such copies in the Continuing Application are substantial. Accordingly, the priority documents in folders of international applications that have not entered the national stage may not be relied on. Notice of April 28, 1987 (1079 O.G. 32 to 46).

19. Maintenance of Copendency of Prior Application

NOTE: The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the papers constituting the filing of the continuation application. Notice of November 5, 1985 (1060 O.G. 27).

A. ☐ Extension of time in prior application

*(This item **must** be completed and the papers filed in the prior application, if the period set in the prior application has run.)*

- ☐ A petition, fee and response extends the term in the pending **prior** application until _____.
- ☐ A **copy** of the petition filed in prior application is attached.

B. ☐ Conditional Petition for Extension of Time in Prior Application

(complete this item, if previous item not applicable)

- ☐ A conditional petition for extension of time is being filed in the pending **prior** application.
- ☐ A **copy** of the conditional petition filed in the prior application is attached.

20. Further Inventorship Statement Where Benefit of Prior Application(s) Claimed

NOTE: "If the continuation, continuation-in-part, or divisional application is filed by less than all the inventors named in the prior application, statement **must** accompany the application when filed requesting deletion of the names of the person or persons who are not inventors of the invention being claimed in the continuation, continuation-in-part, or divisional application." 37 CFR 1.62(a) [emphasis added]. (dealing with the file wrapper continuation situation).

NOTE: "In the case of a continuation-in-part application which adds and claims additional disclosure by amendment, an oath or declaration as required by § 1.63 must be filed. In those situations where a new oath or declaration is required due to additional subject matter being claimed, additional inventors may be named in the continuing application. In a continuation or divisional application which discloses and claims only subject matter disclosed in a prior application, no additional oath or declaration is required and the application must name as inventors the same or less than all the inventors in the prior application." 37 CFR 1.60(c) (dealing with the continuation situation).

(complete applicable item (a), (b) and/or (c) below)

- (a) ☐ This application discloses and claims only subject matter disclosed in the prior application whose particulars are set out above and the inventor(s) in this application are
- ☐ the same.
- ☐ less than those named in the prior application. It is requested that the following inventor(s) identified for the prior application be deleted:

(type name(s) of inventor(s) to be deleted)

- (b) ☐ This application discloses and claims additional disclosure by amendment and a new declaration or oath is being filed. With respect to the prior application, the inventor(s) in this application are
- ☐ the same.
- ☐ the following additional inventor(s) have been added:

(type name(s) of inventor(s) to be added)

- (c) The inventorship for all the claims in this application are
- ☐ the same.
- ☐ not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made
- ☐ is submitted.
- ☐ will be submitted.

21. Abandonment of Prior Application (if applicable)

- ☐ Please abandon the prior application at a time while the prior application is pending, or when the petition for extension of time or to revive in that application is granted, and when this application is granted a filing date, so as to make this application copending with said prior application.

NOTE: According to the Notice of May 13, 1983 (103, TMOG 6-7), the filing of a continuation or continuation-in-part application is a proper response with respect to a petition for extension of time or a petition to revive and should include the express abandonment of the prior application conditioned upon the granting of the petition and the granting of a filing date to the continuing application.

22. Petition for Suspension of Prosecution for the Time Necessary to File an Amendment

WARNING: "The claims of a new application may be finally rejected in the first Office action in those situations where (1) the new application is a continuing application of, or a substitute for, an earlier application, and (2) all the claims of the new application (a) are drawn to the same invention claimed in the earlier application, and (b) would have been properly finally rejected on the grounds of art of record in the next Office action if they had been entered in the earlier application." MPEP, § 706.07(b).

NOTE: Where it is possible that the claims on file will give rise to a first action final for this continuation application and for some reason an amendment cannot be filed promptly (e.g., experimental data is being gathered) it may be desirable to file a petition for suspension of prosecution for the time necessary.

(check the next item, if applicable)

- ☐ There is provided herewith a Petition To Suspend Prosecution for the Time Necessary to File An Amendment (New Application Filed Concurrently)

23. Small Entity (37 CFR § 1.28(a))

- ☐ Applicant has established small entity status by the filing of a verified statement in parent application /_____ on _____.
- ☐ A copy of the verified statement previously filed is included.

WARNING: "Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. Applications filed as continuations, divisions or continuations-in-part of a parent application must include a reference to a verified statement filed in the parent application if status as a small entity is still proper and desired." 37 CFR § 1.28(a).

24. NOTIFICATION IN PARENT APPLICATION OF THIS FILING

- ☐ A notification of the filing of this
(check one of the following)
- ☐ continuation
 - ☐ continuation-in-part
 - ☐ divisional

is being filed in the parent application, from which this application claims priority under 35 U.S.C. § 120.